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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/646,901

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Aaron James Gannon

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EXAMINER

WOODS, ERIC V

ART UNIT

PAPER NUMBER

2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/646,901	Applicant(s) GANNON, AARON JAMES	
	Examiner Eric Woods	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-24 and 28-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-24 and 28-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

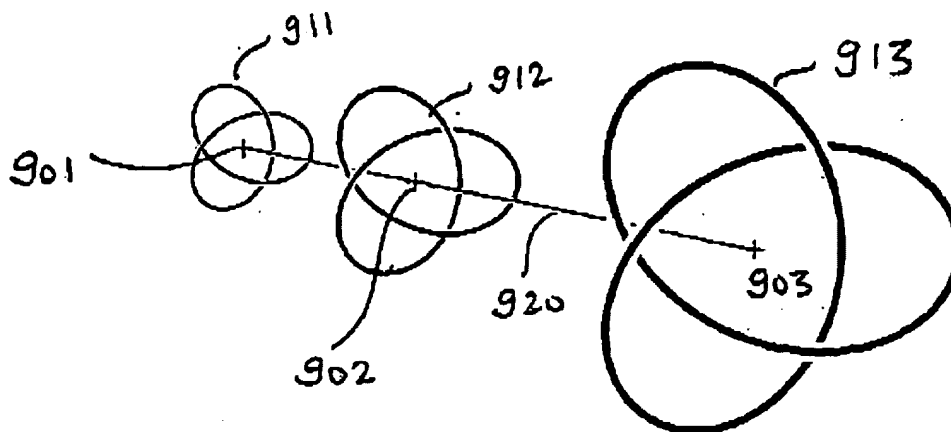
Applicant's arguments have been fully considered and are persuasive; see Remarks pages 1-7 and claim amendments, filed 12/28/2006, with respect to the rejections of claims 1-4, 8-24, and 28-44

Claims 1-4, 8-24, and 28-44 were rejected under 35 USC 112, first paragraph; those rejections have been withdrawn in view of applicant's citation of support in the instant specification.

The rejection of claims 1-4, 8-24, and 28-44 under 35 USC 103(a) does stand withdrawn in view of applicant's arguments, and are replaced with a rejection of those claims over Lee and other references below.

The summary response to the arguments follows below. Applicant contends that the references do not teach that the image edge point remains coincident with the display area edge point. Examiner points out that if the image occupies the entire screen and extends off the screen (as in applicant's Figures 4-10) then clearly the "image edge point" will be on the side of the display with the "display area edge point." They can be coincident if the image is shifted along a zoom line as recited. More specifically, if an image is translated along a zoom line (see for example Figure 9 in the Lee reference, as shown below), the

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entire point is that shifting and zooming the object in question down or up the zoom line drawn through the center of the display and the recited zoom point [0027, 0085-0089] will typically produce the most comfortable location of the zoomed model for detailed viewing and manipulation, **while not losing the original layout for the larger context [0086]**. More specifically, the definition of the Model View Point, which is analogous to applicant's 'zoom points', is defined to be [0031] – "Center of Scaling—the point in a 3D model around which scaling takes places. Sometimes referred to herein as a 'Model Zoom Point.'" Critical to that assumption is that the object is shifted along the aforementioned line and clearly, such a line will pass through a given image edge point/display area edge point. The result is that the **display area edge point** that the line initially passes through will remain constant during the scale operation through the recited intermediate points. Where the optimum viewing point 903 is the center clearly, the point 901 represents the recited 'zoom points,' and as noted above, the line will extend from the center through the zoom point and the display edge point

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(note that Lee teaches displays are inherently finite, etc [0053], so there will be cases where model clearly extends past display boundaries (Figures 4A-4B)).

This correspondence is intrinsically part of the function of the recited reference, wherein the entire screen can consist of the view volume or image, and can be at least fairly regarded as teaching that such volume can extend to the edges of the screen or beyond, particularly in the case of zooming.

With respect to claims 41 and 43, examiner turns to the instant specification, namely paragraph [0035], which states that purpose of the position of the original zoom point is stored is to determine whether the selected zoom point 402 is substantially collocated at a point such that no single display area edge 206 is closest. The examples given are for cases wherein the zoom point is the central / center point of the display or the zoom point is on a line that extends from the central point through one of the corners.

The reason that this point is raised that such claims are only valid for those scenarios, because otherwise the zoom point (e.g. Figure 13, points 402E or 402F) clearly would have a point on the x or y (horizontal or vertical) display edge that is closer than points 506E and 506F otherwise. This is because the lines formed between center point 210 and the respective zoom points are diagonal, and the shortest distance between the recited zoom points and the edge would be a straight (e.g. orthogonal) line [0041-0042]. Therefore, claims 41-44 can only be valid for the scenarios above (e.g. wherein the center point is the zoom point, or wherein the zoom point lies on a line formed between a corner of the display and the center point. This is because the claims read in part:

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"changing the relative size of the selected zoom point while (i) translating the selected zoom point along a straight zoom line that passes through the selected zoom point and **extends between a central point in the display area and an edge point on the display area that is closest to the selected zoom point...**"

Clearly, if the closest point was a straight line (as in for cases with zoom points 506E and 506F in Figure 13) connection from the zoom point to the edge, the claim would not be valid, since a line could not possibly pass through that point and still meet the other criteria of the claim. Therefore, as noted above, it is only valid for the two situations described above and in applicant's specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 1- 4, 8, 21-24, 28, and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duke et al (US 6,407,749) in view of Lee et al (US PGPub 2004/0233222 A1).

As to claims 1 and 21 (method and system, additional system limitations will be addressed in a separate addendum below the following),

In a display including one or more edges that define a display area in which at least a portion of an image including an edge point is displayed, a method of changing the relative size of the displayed image, comprising the steps of: (Lee clearly teaches a display having edges, wherein the display is part of a computer system having a CPU and storage medium providing the program to control the display, etc – [0099-0100])

-Selecting a zoom point in the display image, the zoom point corresponding to a point in the displayed image that is to be zoomed, the image edge point located at a position on the display area edge that coincides with an edge point on the display area; and (Lee clearly teaches selecting the model zoom point, once the system is activated to enter zoom mode [0059-0080]. Clearly, as illustrated in Figure 9, the selected Model Zoom Point is on the display. When the system is in initial mode, clearly the image edge points will be coincident with edges of the display if the display is full-screen)

-Changing the relative size of the selected zoom point while (i) translating the selected zoom point along a straight zoom line that passes through the selected zoom point and extends between a central point in the display area and the display area edge point and (ii) maintaining the position of the image edge point

such that the image edge point remains coincident with the display area edge point.

(Lee teaches that the points are moved along a zoom line as in Figure 9, with the magnified points moving along the line 920 as in Figure 9 [0085-0089], where the position of the edge points is preserved with respect to the center point (OVP, [0027], etc). As illustrated in Figure 10, the objects are translated along the straight zoom line specified in Figure 9, that is, the user selects the Model Zoom Point 901 and translates it along the line to the Optimum Viewing Point 903 as illustrated in Figure 9, where this is explained in [0086] as a process such that the unzoomed starting value ($\lambda=1$, point 901, a zero translation) is connected to a translation via a vector equal to the required translation, moving the MVP towards the OVP via the intermediate point 902 which clearly illustrates the line 920, and it is clear in Figure 9 that line 920 passes through points 912 and 913 and their edge equally at the same position such that it is in fact being precisely translated along the line without any shift in location)

Lee teaches all the limitations of the above claim, but does not expressly teach that image edge point remains coincident with the display area edge point. However, if the entire screen in Lee's invention consists of the view volume or image, and thus the volume extends to the edges of the screen or beyond (as explained in the response to arguments), the image edge point would be coincident with the recited display edge point. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to allow the user to utilize full-screen mode in order to more effectively visualize a complex

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three-dimensional data set where understanding of the interrelationship of each component would be critical for tasks requiring precision (e.g. understanding the structure of an aneurysm or the like [0103]). Once such a modification is made, the display edge point would be coincident with the recited image edge point, and since the translation line would move the area the recited zoom point (MVP) towards the OVP (as in [0085-0089], 0027) the area around the recited zoom point would shift, but the original image edge point / display edge area point line would still exist, since clearly Figure 9 defines the line from the OVP through the MVP, and such a line would extend through the edge of the display, thusly the two would be forced to remain coincident.

As to claim 21, clearly Lee teaches a user interface ([0008-0009, 0045, 0054] operable to receive user input, where clearly this user interface receives signal in order to allow the zooming to take place (Abstract, [0045-0054], etc), the display screen is clearly illustrated in Figures 11-18, for example, and in [0099-0101], where such a display clearly has finite and bounded edges, and finally such a system has a CPU that is programmed to perform the recited functionality [0099-0101].

As to claims 2 and 22, Lee clearly teaches that the invention may map the point at which the zoom is centered is mapped to the center of the screen [0004, 0027, 0031-0032, etc], given that the user has the choice of moving the crop/clipping boxes and the fact that as the image is zoomed, it moves toward the optimum viewing point (OVP). It would be obvious that once the zoom point coincides with the center of the screen that it would no longer be moved, since

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any motion away from the center of the screen would be compensated for such that the point would automatically return to the center of the screen [0049] and Figure 2A show such a centered item and that scaling it merely increases its size around a center point. Lee does expressly teach a maximum or minimum relative size per se; λ can be bounded, as in Figure 8, with a minimum and maximum allowed value [0084].

As to claims 3 and 23, Lee maps the selected zoom point (MVP) towards the center of the screen (OVP). However, if a point is mapped to the center of the screen, there would be no need to translate it whatsoever if the desire were only to change the zoom level. It would be obvious that once the zoom point coincides with the center of the screen that it would no longer be moved, since any motion away from the center of the screen would be compensated for such that the point would automatically return to the center of the screen. Therefore, Lee discloses the invention as specified in the negatively limiting claims of claims 3 and 23.

As to claims 4 and 24, Lee clearly teaches in [0053] that the display is inherent to the finite nature of the display apparatus, in that the user can only see some portion of the recited model at any given time, wherein when the object is enlarged, some portion of the image (e.g. non-edge image points) are translated off of the image. See Figures 4A-4B.

As to claims 8 and 28, clearly Lee teaches that the image is enlarged around the Model View Point a.k.a. zoom point. More specifically, if an image is translated along a zoom line (see for example Figure 9 in the Lee reference, as

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shown below), the entire point is that shifting and zooming the object in question down or up the zoom line drawn through the center of the display and the recited zoom point [0027, 0085-0089] will typically produce the most comfortable location of the zoomed model for detailed viewing and manipulation, **while not losing the original layout for the larger context [0086]**. More specifically, the definition of the Model View Point, which is analogous to applicant's 'zoom points', is defined to be [0031] – "Center of Scaling—the point in a 3D model around which scaling takes places. Sometimes referred to herein as a 'Model Zoom Point.'"

As to claim 41, this is a broader version of claim 1, excluding the limitation from the first clause that "the image edge point located at a position on the display area edge that coincides with an edge point on the display area". Therefore, the rejection to claim 1 is incorporated by reference in its entirety. As noted by the CCPA (*In re Karlson*, 136 USPQ184 (1963)), the omission of an element (or step) and its function in a combination is an obvious expedient if the remaining elements or steps performs the same functions as before, which in the instant case they do. As noted above, the Lee reference performs the recited function.

Additionally, the claim includes the limitation that the display area edge point be the edge point that is the closest to the selected zoom point. Examiner has addressed this situation in the Response to Arguments section. As in the rejection to claim 3, Lee teaches the scenario wherein the central point coincides with the zoom point. In the case of the other situation (e.g. the point is on a line

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extending between a display area corner and the central point, as in Figure 13 the case of zoom point 402A and display corner point 506A), the rejection in claim 1 produces results that are **functionally equivalent** in the results with respect to claim 1. Therefore, such a limitation would have been obvious since the results would have been the same, and the system of claim 1 would perform the recited scenario for the case where the display area edge point was one of the corners.

As to claim 42, note that the system of Lee clearly has many portions of non-edge-point image points (see Figures 11-18 for example), given that Lee utilizes both clip and crop boxes, which by definition remove certain portions of the images (see for example Figure 4 and the discussion therein, and [0008-0009, 0017-0019, 0027, 0053, 0063-0065]. As noted above, the Lee reference performs the recited function.

As to claim 43, this is merely a broader version of claim 21, the rejection to which is incorporated by reference. As noted by the CCPA (*In re Karlson*, 136 USPQ184 (1963)), the omission of an element (or step) and its function in a combination is an obvious expedient if the remaining elements or steps performs the same functions as before, which in the instant case they do. As noted above, Lee clearly shows a set of displayed images that includes a plurality of image points aligned with the display edge – see right side of the display shown therein. Clearly, this constitutes a plurality of image points. Next, 'maintain the alignment' merely means that the image points must be held in their relative position to the image edge point, which as pointed out above would be inherent because the

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zoom point is translated on a line that crosses through the recited edge point, it's position on the edge relative to the other edge points would not change, as its position relative to the zoom point and the center point would not change. As noted above, the Lee reference performs the recited function.

As to claim 44, it is claim 42, except applied to the system claim, where that rejection is incorporated by reference. As noted above, the Lee reference performs the recited functions.

Claims 9, 11-19, 29, and 32-39 are rejected under 35 U.S.C. 103(a) as unpatentable over Lee as applied to claims 1 and 21 above, and further in view of Kaizuka et al, an analogous art

Kaizuka et al. teaches of the invention of claims 9 and 29. Lee does teach the use of clipping boxes and similar, but does not expressly show them or suggest them. Kaizuka Figures 3A – 3E and 8A – 8D show a rectangular border surrounding the selected zoom portion such that the border is translated substantially coincident with the translation of the selected zoom area.

Motivation for combining Lee and Kaizuka is taken from the fact that Kaizuka (2:65-3:20) provides a method for zooming images that does not require additional storage capacity, that can display images at high speed when zooming at the original precision (resolution), and the like, which would clearly improve the zooming capabilities of Lee.

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Kaizuka et al. teaches of the invention of claims 11 and 31; Lee does not expressly teach this limitation. Kaizuka Column 14, lines 65 – 67, and column 15, lines 1 – 2, describe a data storage section to store image data for zoom processing. “More specifically, until image data in the designated wide range is read out on the server and transferred to the client, stepwise zoom-out processing is performed using image data stored in the data storage section 18 of the client.” Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 12 and 32; Lee does not expressly teach this limitation. Kaizuka Column 14, lines 62 – 65, states, “When an image currently displayed on the image display section 17 on the client side is to be zoomed out to display a wider range, the above-described zooming processing can be applied.” Thus, Kaizuka teaches of performing a zoom-out function in a manner opposite to that which the zoom area was originally changed. Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 13 and 33; Lee does not expressly teach this limitation. As shown in Kaizuka Figures 3A – 3E and 8A – 8D, each image point from an original position in the selected zoom portion is translated to a final position when changing the relative size of the selected zoom area. Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 14 and 34; Lee does not expressly teach this limitation. Kaizuka Column 14, lines 65 – 67, and column 15, lines 1 – 2, describe a data storage section to store image data for zoom processing. “More specifically, until image data in the designated wide range is

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read out on the server and transferred to the client, stepwise zoom-out processing is performed using image data stored in the data storage section 18 of the client.” Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 15 and 35; Lee does not expressly teach this limitation. Kaizuka Column 14, lines 62 – 65, states, “When an image currently displayed on the image display section 17 on the client side is to be zoomed out to display a wider range, the above-described zooming processing can be applied.” Thus, Kaizuka teaches of performing a zoom-out function in a manner opposite to that which the zoom area was originally changed. By performing the process of figures 3A – 3E and 8A – 8D in a manner opposite to that which the zoom area was originally changed, it can be seen that each image point in the selected zoom area is translated along a substantially straight line from its final position to its stored original position when changing the relative size of the selected zoom point. Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 16 and 36; Lee does not expressly teach this limitation. Figure 19A shows an image with a plurality of arrows positioned next to the image for scrolling purposes. When scrolling an image, the positions of the image points in the image will be changed to updated positions. Thus, the final and original as well as each of the image points will be changed to an updated position. Column 14, lines 65 – 67, and column 15, lines 1 – 2, describe a data storage section to store image data for zoom processing. “More specifically, until image data in the designated wide range is read out on

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the server and transferred to the client, stepwise zoom-out processing is performed using image data stored in the data storage section 18 of the client." Additionally, Column 14, lines 62 – 65, states, "When an image currently displayed on the image display section 17 on the client side is to be zoomed out to display a wider range, the above-described zooming processing can be applied." Thus, Kaizuka teaches of performing a zoom-out function in a manner opposite to that which the zoom area was originally changed. By performing the process of figures 3A – 3E and 8A – 8D in a manner opposite to that which the zoom area was originally changed with the updated scrolled image, it can be seen that each image point in the selected zoom area is translated along a substantially straight line from its changed final position to its changed original position when changing the relative size of the selected zoom point.

Motivation/rationale is taken from the rejection of claim 9 above.

Kaizuka et al. teaches of the invention of claims 17 – 19 and 37 – 39; Lee does not expressly teach this limitation. Kaizuka teaches of both a zoom-in and a zoom-out process whereby the two are performed in a manner opposite to each other. Thus, after performing a zoom-in and zoom-out process on an image, the original image is available to the user once again. Upon selecting a new zoom portion after having already changed the image by zooming in and out, the new zoom portion original position is its position before the relative size of the previously selected zoom point was changed. Additionally, as seen in figures 3A – 3E and 8A – 8D, the zoom portion is translated along an original zoom line that is a substantially straight line that passes through the new zoom

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point original position and extends between the display area central point and a display area edge point that is closest to the new zoom point. By translating the new zoom portion to the center of the frame, the relative size of the new zoom area is changed and occupies a position it would have occupied had the new zoom area been the previously selected zoom area. Thus, the new zoom area is moved from its present location as shown in figures 3A and 8A to a new position on the new zoom area original zoom line as shown in figures 3E and 8D.

Motivation/rationale is taken from the rejection of claim 9 above.

Claims 20 and 40 are rejected under 35 USC 103(a) as unpatentable over Lee in view of Kaizuka as applied to claims 17 and 37, and further in view of Duke (6,407,749) and Kato (US 6,333,996).

As to claims 20 and 40, the processor of Lee clearly moves through the display area central point and the new zoom point on the display since the line is linear and the image is moved directly along the line, but Lee does not teach averaging zoom lines and the like, nor does Kaizuka. Duke clearly teaches that it is advantageous to allow the user to draw a vector that has both direction and magnitude based on user selection of how long the mouse button is held down in order to facilitate easier zooming and scrolling operations. Duke clearly teaches changing the relative size of the zoom point (e.g. zooming the display), for example moving the central point of the display along a line parallel to that of the zoom path desired by the user, where the vector created to do so (vector 33, Figure 2A) extends from the central point of the display (point 27, Figure 2A)) and

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is parallel with and equal to (in magnitude) to the user director vector described above (4:27-63). See Figure 2B, where clearly the original point 30 has been shifted along the vector to ghost pointer location 31, where the point 31 in Figure 2A has now become the original pointer location 30 in Figure 2B (4:62-67). **The advantages of this arrangement are stated in 3:39-63, wherein it allows for more efficient operation of the zooming mechanism.** Kato 21:10-25 teaches that the user inputs writing or lines at various rates. Since the system of Duke has easier user input that facilitates more efficient zooming and scrolling, Kato would teach to use an average handwriting or user line creation rate to achieve better accuracy and precision and the like with respect to user input (20:20-22:50).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Lee and Kaizuka to allow the user to express the zoom vector of the desired magnitude by using one of the input devices to increase user efficiency with zooming and scrolling as described above. Therefore, since the user would be drawing lines with the input device with the system of Lee / Kaizuka as modified by Duke, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use average inputs, e.g. the average the user input line with the old line to account for user jitter when drawing the desired input / scroll / zoom line as in Duke so as to obtain a more accurate representation of the desired user input and to smooth it as discussed above by the Kato reference.

Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Kaizuka as applied to claims 9 and 29 above, respectively, and further in view of Conrad et al.

Lee does not expressly teach this limitation. Kaizuka et al. teaches of the invention of claims 10 and 30 except removing the zoom symbol from the display area when the cursor symbol is moved. Kaizuka Column 17, lines 11 – 16, describe displaying a cursor symbol in the display area. “On the displayed image shown in FIG. 8A, a mouse cursor 33 is moved to the central point or an arbitrary point of a rectangular region (the region has similar shape to the display frame 31, and the similitude ratio is determined in advance) as a zooming target, and the region to be enlarged is designated by clicking the mouse.” Conrad et al. teaches of a graphical user interface that opens and closes enclosures when an object is dragged over a location on top of an icon or text representing a closed enclosure. Column 11, lines 17 – 27, describes removing a select icon when the cursor is moved through a designated area. “In FIGS. 15A and 15B, another alternative sequence is shown. In this sequence, a dragged icon 1501 is dragged over a folder. When this occurs, a select icon appears, such as an opened folder icon 1502 with a split pie symbol. The split pie has a first side 1503 and a second side 1504. If the user moves the cursor downward to the second side 1504, as illustrated in FIG. 15B, then the sprung open enclosure is opened. Alternatively, if the user moves the cursor upward into the first side 1503, then some other action may occur. If user moves the cursor through the split pie, then the select icon is removed and the original icon reappears.” Thus,

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Conrad teaches of removing the select symbol when the cursor is moved from a certain location. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Lee/Kaizuka to include removing the zoom symbol from the display area when the cursor symbol is moved. One would have been motivated to make such a modification to Lee and Kaizuka so that when a zooming function is not being performed on the selected portion of an image, the zoom symbol is quickly removed when a user moves the cursor symbol out of the zoom region, thus preventing any blocking of the image by the zoom symbol.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Woods

March 13, 2007

ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER